

Winter Driving Now Feature in All Parts of the United States

Snow Falls to Hinder Progress of Automobile; Twenty-four Hours After the Worst Storm, Traffic May Be Resumed With Wonderful Results.

By CLIFFORD H. BROOKMAN,
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At one time it was customary to stow the old hat in the barn when the first snowflakes appeared and not get it out until the early summer. This may hold true in some of the back country districts yet, but for city driving, there seems to be little difference between summer and winter.

Of course there is less purely pleasure driving, but the automobile has come to be such a part of the daily life that the average owner would not think he could possibly get along without it. Even last winter, when the continued storms and low temperatures made the streets nightmares, automobiles ploughed through drifts and over the ice mounds and got there when street car systems failed and traffic generally was in a considerable tangle.

In these days, when streets are supposed to be cleaned promptly after a snowfall and when suburban thoroughfares are in fair condition, twenty-four hours after a storm, there is no reason why winter driving should not be the rule rather than the exception. One must adapt one's self to the different conditions and learn how to make the auto "act" when it ought to.

The first difficulty encountered in winter driving is starting the motor. Low grades of gasoline do not vaporize readily at low temperatures. They may spray through the needle valve, but when they hit the cold walls of the mixing chamber, manifold, and the cylinder, there is a quick condensation, and liquid gasoline is about as non-inflammable as water. The problem, therefore, is one of vaporization. This may be accomplished in a number of ways. There are a number of devices sold for warming the carburetor and intake manifold, or keeping them warm. These devices are not too expensive for the average owner.

When the carburetor is water-jacketed, it is also possible to drain the cooling system and fill it up with hot water before starting the engine, and at a last resort one may wrap a cloth around the intake manifold, pour over it hot water from the tea-kettle, observing due care not to mix any of it with the gasoline in the carburetor. Any of these means will raise the temperature enough to allow evaporation so that the engine will start. Of course when it is running it produces heat enough to cause proper evaporation.

COLD WEATHER TROUBLES.
A previous article has dealt with the cold weather troubles of the cooling system and the necessity for an anti-freeze solution and for covering the radiator. With some motors it is found advisable also to remove the fan belt, but ordinarily it is much better to let the fan run and cover as much of the radiator as is necessary to give proper temperature to the engine.

The next problem which the winter driver must consider is the electric system. Presumably the car has an electric starter. This means that the battery which supplies current to turn over the starting motor must have a great deal more care than in the summer time. This is necessary for several reasons. First, the battery does not work so well in cold weather. The battery does not really store electricity, it produces it by chemical action and chemical action is always slower at low temperatures. Therefore the battery must be favored.

Nevertheless greater care is made upon the battery in winter than in summer. It takes longer to get the starter to get the engine going and every second makes a terrific drain upon the battery. Lights are burned much longer in winter, and there are fewer long drives to give the generator a chance to charge the battery so that it is in danger of being starved and then suddenly refusing to function. The solution is to have the battery at a service station once a month or so, and have it fully charged. If this is not done, there is likely to be failure, trouble with the lights and failure to turn over the engine properly in starting. Some generators are equipped with a variable speed governor, adjustment of which will increase the amount of current sent into the battery.

Lubrication of the car is another important thing in winter driving. It is doubly important to screw down all grease cups and squirt oil into every hole and every working joint and it is necessary to use the proper kind of oil or grease is used in the gear shift case and the differential case. If too heavy oil or grease is used, it makes an unnecessary drag on the engine, using up several horsepower because of the braking effect. Because the grease is stiff, it is a poor idea to kick out the clutch when you press the self-starter pedal to relieve the motor of its load.

The lubrication of the clutch and keeping it clean are other important things in winter especially if it is a disk clutch, for the clutch which does not work freely is a nuisance.

A light winter oil should be used in the crank case in cold weather, its character being determined by the manufacturer's instruction book, but it must be changed much more frequently in winter because of the extra

Revival of Business Predicted By Noted Automobile Authority

DETROIT.—That we shall witness a revival of business and employment generally in 1921 is the prediction of William E. Metzger, one of the pioneers of the automobile industry, and a director of the National Automobile Chamber of Commerce.

Mr. Metzger's cheerful prediction is based on his long experience in many lines of business, on first hand information from some of the greatest and far-seeing bankers and manufacturers, and on a summary of fundamental conditions just completed by the Columbia company. He expects 1921 to be a year of sure, steady growth in business and a period in which a firm foundation will be laid for years of prosperity.

"There are two things for every business man to do NOW," says Mr. Metzger. "One is to employ every fair method to keep his wares moving for the next two or three months. The other is to lay plans now for future business, that is, business three or four months away, such as naturally comes with the change of seasons in the spring. This applies to all lines of business, including retailing of automobiles."

"There is nothing mysterious or alarming about the present situation. We and all other countries are paying for the world war. It causes a tremendous wastage of men, money, effort and resources and all that waste must be paid for. Just as it takes a man who has been ill almost to the point of death a long time to recover, so it will take the world time to recover. Some countries will recuperate more quickly than others because they are not so hard hit by the war and because they have the tremendous natural resources for the creation of new agricultural and manufactured wealth that will make their convalescence not only easy but quick. Such a one is our country. For that reason, we should all be glad that we live in the United States."

RECOVERY DUE.
"There are many signs now apparent that recovery in our country is well under way. And those who observe conditions abroad know that reaction of more favorable character is prevalent in England, France, Holland, Belgium, the Scandinavian and other countries."

"Just because the demand for automobiles, to select a specific article as an example, has fallen off," continued Mr. Metzger, "does not at all signify that it will not revive and soon. This is the fastest thinking, the fastest action, the 'snappiest' nation in the world today, and it demands every facility that will result in the best accomplishment in the shortest possible

time. That is the fundamental reason why we desire to own a motor car is in the heart of every American, and that desire has not been abated one jot by present conditions. The longer demand is repressed the greater the buying reaction when it comes—and that will be soon."

"Just now demand is slow in all lines. Home building has fallen off, people are doing without shoes, coats, hats, gloves and many other things ordinarily regarded as necessities, just as long as possible."

"The result of this attitude has been what?" asked Mr. Metzger.

"Liquidity everywhere and in almost everything," to answer my own question.

"On every stock market we have seen impressive fall in prices of shares, but without the panic that usually comes with such a condition. Wheat, corn, oats and other grains, cattle, hogs, livestock, all have fallen in price. Cotton is at the lowest figure it has seen in years. We all know what happened to sugar. Copper is down to record low prices. The wool market took a severe tumble. Silk tumbled. Leather and hides are way down. Coal, clothing and food are on the toboggan. You can go through the smallest towns in the country today and find the merchants there advertising sales at price reductions. Bread and milk are going down. Liquidity is the order of the day, but the very best judges of the situation are agreed that in many essential commodities it has about run its course."

SOON TO COME.
"I cite these facts because it is just from such conditions as we are now experiencing that a boom in business springs. Keep that statement in mind. The world must buy. When it has made up its mind that it must have things and that the prices at which it can get them are right, it will buy again and more than ever before."

"Now getting back to the automobile business for a moment. Production has been curtailed for several months. Every day of lessened production, or production that merely keeps pace with present sales means a scarcity of automobiles when the demand revives, which I feel sure it will do in the spring, and perhaps sooner. I feel sure that the automobile shows will strike an emphatic note of better business, and it should be the duty of every one in the trade, from office boy up, to get such an outpouring of people to the shows this winter as we have never seen before. Just as the reserve stock of automobiles is being wiped out by under-production, the same is true in many other lines of manufacture."

BUILDING OF NEW ROADS DEMANDED FOR JOY ONLY

Congress Called On to Give Funds and Thus Put Many to Work

WASHINGTON, Dec. 15.—"If unemployment assumes widespread proportions, the most logical answer to the situation would be the prompt utilization of this excess labor in the building of highways possessing an interstate significance," comments David Jameson, president of the American Automobile Association, which organization has been prominently identified with roads here since its formation at Chicago in March, 1902.

NO LABOR SURPLUS.
"It will be remembered that when congress was approached some two years ago for \$200,000,000 additional under the provisions of the federal aid road act, Mr. Jameson said: 'It will set forth that this money, which called for an equal amount from the several states, would serve to carry on road building and absorb the surplus labor which it was anticipated would result from the abrupt conclusion of the big struggle. Besides this total of \$200,000,000 from the National Treasury and the several states, the sum of \$9,000,000 was added to the \$10,000,000 previously appropriated for the construction of roads in federal forest reserves."

OPPORTUNITY TIME NOW.
"But the period of non-employment did not arrive, besides which there was difficulty in obtaining materials and their shipment and the abnormal prices cut down very substantially the road mileage. Present indications, however, are that the supply of labor in the near future may considerably exceed the demand, and hence a recourse to important public improvements, would be a direct means of stabilizing labor conditions. Surely there can be no better benefit conferred upon the entire country than by the building of highways which will materially reduce the cost of transportation and facilitate the exchange of farm and manufactured products between the country districts and the centers of population. Congress could not act more wisely than to pass at this short session the Townsend bill, calling for the creation of a federal commission to lay out a system of interstate highways and arrange with the several states for the prosecution of this national undertaking at the very earliest moment. The building of roads is one thing which will unquestionably improve conditions, and we are all now well aware of the fact that public sentiment is overwhelmingly in favor of maximum activity and the road, from nation, state and county."

ROBBERS FOILED.
NEW BRUNSWICK, N. J., Dec. 15.—Robbers who entered the jewelry store of O. O. Sullivan here, learned that the theory of three-card monte may be applied to burglary insurance. Sullivan keeps three safes so that burglars will have to guess which is worth cracking. The two-to-one chance against them proved too much for the recent intruders, who opened one of the empty two, and then quit the game, leaving that with the valuables intact.

Cocoa nut oil in large quantities is being imported for the manufacture of nut butter, candies, soap and cosmetics.

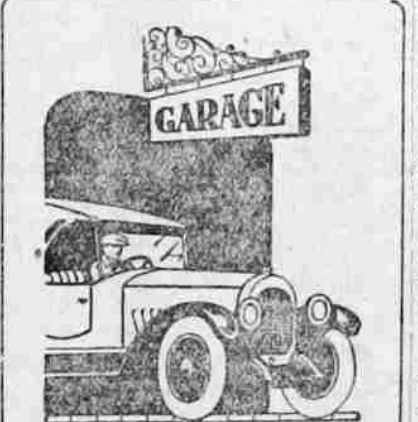
AUTO NO LONGER FOR JOY ONLY

Survey Shows Ninety P. C. of Nation's Cars Are Used Partially in Business

"That the automobile is a national necessity is illustrated by the fact that of the seven and one-half million of motor vehicles registered in 1919, 99 per cent were employed totally or in part for business purposes," said Manager C. H. Sander of the Ogden Oldsmobile company, local distributors for (oldsmobile passenger cars and trucks. "Using 2500 miles per annum as a conservative average individual mileage, we find that 22,500,000,000 miles were covered last year in automobiles. And over 60 per cent of this mileage was employed exclusively for business uses."

"The automobile has long ceased to be purely a pleasure vehicle. But were its utilitarian benefits absolutely discounted, the hours of happiness secured through its operation by the American family would elevate it to the plane of necessity. There is no endeavor, no activity, to which the automobile is not essential. The doctor, the salesman, the merchant, the farmer, the manufacturer, all could not dispense with it."

"Consider yourself, whether you possess one or not, the automobile is an important factor in your life. While you are still asking, fast running fleets of motor cars are bearing milk to this city, their rapidly insures its purity."



SERVICE
When you place your car in this garage, we consider that it is under our guardianship in every respect and we give it the same careful watchfulness and attention to its care and welfare as you would yourself if you had the same complete facilities. Day and night service if you are troubled on the road. Call or phone.

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SEDAN AND COUPE HIGH IN COMFORT

Statement Asserts There's Few Days When Open Top Is Desired

By H. E. HARPER,
President, National Automobile Dealers' Association.
A house with a canvas roof is a little better than a tent, but not much. But if the occupant of the house wanted to remove the roof every few hours, he would be compelled to use canvas or other light fabric. The motor car rider took every body's dirt, for he had no protection. The top was only for a rainy day and invariably he got wet for the rain does not always advertise its coming—even when it does, it is human nature to wait until the last minute.

It is a question whether any motor car owner now drives with the top down more than five per cent of the time. Why, then, use a temporary cover permanently? I know an old lady who always carried an umbrella over her head because it might rain. A motor car is a unit of transportation, destined to become the most important unit. What other unit has one type of car for summer and one for winter?

There is no argument against closed cars for winter—everyone admits their superiority.

There may be a few occasions during the summer when a car with top down is desirable. Supposing there are ten such occasions—that's three hundred and sixty-five against ten. The wide-awake who has had cold, dust and rain, wind and bugs. The ordinary top keeps out some of the rain.

A sedan top looks good all the time. The fabric, collapsible top looks good only when it is folded out of sight—and the more it is so folded the worse it looks when you have to put it up. The wide-awake who has had cold, dust and rain, wind and bugs. The ordinary top keeps out some of the rain.

insures the health of your family, the food upon your table—the clothing you wear—the furniture of your home—all at some time have been transported upon an automobile.

Your home may be in a suburban community, if so, it was made possible by the automobile. The wage earner with his modest priced car can find a home miles from his work and yet be unaffected by its remoteness.

"When one industry can benefit the life of an entire nation—when it is indispensable to eight millions of families there can be no doubt that its product is an essential. The automobile is the greatest mechanical necessity of the age. Eight millions acclaim the automobile a necessity and the majority seldom errs in judgment."

COUPLE AGED 50 MARRY
(By International News Service)
LONDON.—Both aged eighty, Mrs. Elsie and William Wilkinson, widow and widower, were married at St. Peter's church, Cleethorpes. They were both in receipt of old-age pensions. Mr. Wilkinson formerly an agricultural laborer, said they found they liked each other's company, hence, the marriage.

DODGE BROTHERS ROADSTER

Its preference is so pronounced that cars of two, three or four years' use are eagerly sought.

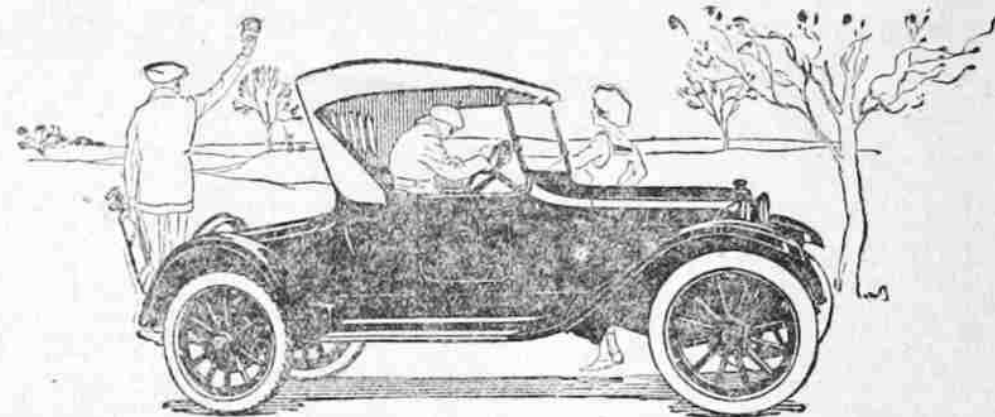
There are few of them in the market and they always command a high price.

The gasoline consumption is unusually low.
The tire mileage is unusually high.

CHEESMAN AUTOMOBILE CO.

Phone 325

2566 Washington Ave.



Auto Storage Has Important Factors

Preparing a car for winter storage does not consist only of running it into a garage, jacking up the four wheels, and draining the radiator. Unless the whole mechanism is given an adequate amount of attention depreciation may be remarkably high. As a first step it is necessary to give the car a thorough cleaning. For the unpainted and tarnishable metal parts of the car no protective coating is better than ordinary grease or vaseline, but it is necessary to have these parts thoroughly dry before anointing them, for otherwise rusting may occur beneath the grease. Lamps, instruments of the cowl boards, your tools and jack, springs, steering knuckles and the like should all be given a generous coating.

If you have wire wheels and find that some of the spoke enamel has chipped off, grease the bare spots, and observe the same procedure with the car body and fenders. Go over the whole car greasing even small parts like lighting and ignition terminals that may rust. Clean the interior of the car thoroughly, removing dust deposits from the upholstery and corners, and brush the top carefully. Leather upholstery as well as the top and side curtains should be painted lightly with linseed oil.

PRELIMINARY WORK.
With this preliminary work done, jack up the four corners and remove the tires and rims from the wheels.

If the rims are not rusty they may be left on the tires, but they as well as the casings should be thoroughly cleaned with gasoline and wrapped in cloth or burlap. Store in a room which is not subject to extremes of

HOLIDAY GREETINGS

We hope the year 1920 has been kind to all and that the new year will bring even greater success and happiness.

Pacific Nash Motor Co.
2200 Washington Ave.

YULETIDE GREETINGS TO OUR FRIENDS

It is a great pleasure to us to offer kindly greetings of the season to friends and customers, wishing for them a prosperous New Year.

BINFORD-KIMBALL MOTOR CO.